Department of Pesticide Regulation

Mary-Ann Warmerdam
Director

M E M O R A N D U M

Arnold Schwarzenegger
Governor

TO: Catherine Witherspoon
Executive Officer
Air Resources Board

FROM: Mary-Ann Warmerdam *Original signed by*
Director
(916) 445-4000

DATE: January 29, 2007

SUBJECT: PROPOSED TOXIC AIR CONTAMINANT MONITORING FOR 2007

Pursuant to Food and Agricultural Code section 14022(c), the Department of Pesticide Regulation (DPR) requests that the Air Resources Board (ARB) monitor for the following pesticides in 2007:

- Acrolein.
- Methomyl and Carbaryl.
- Phosphine.

DPR requests that ARB monitor one application site for acrolein because it has moderate pesticidal use and high volatility. In addition, both ARB and the Office of Environmental Health Hazard Assessment have an interest in the nonpesticidal exposures to acrolein. This monitoring will help give all agencies a more complete picture of the overall risk. Acrolein is primarily used as an aquatic herbicide in irrigation canals. ARB staff monitored one application site in 2006; however, due to site limitations, only a short part of the canal could be monitored. Monitoring in 2007 should occur at a canal that can be monitored for at least one mile. Monitoring a pond application may be an alternative.

DPR requests that ARB monitor one application site and conduct ambient monitoring for methomyl. This carbamate insecticide is used on a variety of crops and is high priority for risk assessment. DPR will provide recommendations for dates and locations of monitoring after evaluating recent pesticide use data. Since carbaryl can be analyzed simultaneously with methomyl using minimal additional resources, DPR also requests that the methomyl ambient monitoring include carbaryl. No application-site monitoring and no extra ambient samples are needed for carbaryl.

DPR requests that ARB monitor one application site for phosphine because it has moderate pesticidal use, high volatility, and high priority for risk assessment. Phosphine gas is registered as an active ingredient, but more commonly it is applied as an inorganic

phosphide (e.g., aluminum phosphide, magnesium phosphide). All phosphine compounds are used primarily as a post-harvest commodity fumigant in chambers or other enclosures. As a commodity fumigant, source and off-site monitoring may be needed.

Based on a preliminary assessment of the toxicology data, DPR requests the following target quantitation limits:

- Acrolein 0.7 $\mu g/m^3$
- Methomyl 0.01 $\mu g/m^3$
- Carbaryl no specific target
- Phosphine 10 $\mu g/m^3$

Thank you for your consideration of this request. If you have any questions, please feel free to contact Dr. John S. Sanders, of my staff, at (916) 324-4155.

cc: Dr. Joan E. Denton, Director, Office of Environmental Health Hazard Assessment
Dr. John S. Sanders